Contract HK 12/02
Central Reclamation Phase III – Engineering Works
Environmental Permit No.: FEP-01/122/2003

Certification and Verification for Change of FEP Condition 3.2(a) – Advanced FRAW Seawall Dredging & Filling – Daytime Operations

ET Leader's Certification

We refer to the proposal by Leighton – China State – Van Oord Joint Venture (hereinafter referred to as the JV) to conduct daytime dredging and filling of the FRAW Seawall Trench starting from November 2006 [*letter to the Engineer's Representative, 6 November 2006, H2189/C1/23033/MP/EY/GL/ST/ec which describes the dredging works they propose to undertake at FRAW prior to the relocation of seawater intakes M4A and M3 - shown in Figure 4.2, Annex C of the Monthly Environmental Monitoring & Audit Report 35 – June 2006 and the protection measures that they intend to implement to prevent water quality impacts at these intakes]*.

The JV's proposal differs from the reclamation phasing works that were assessed as part of the water quality assessment in the approved Central Reclamation Phase III EIA Report (Appendix C Detailed Construction Programme). In the EIA, the assessment was based on the relocation of all seawater intakes to the outer seawall prior to any dredging / reclamation works to be undertaken within FRAW. The assessment undertaken in the EIA and information on the construction activities to be undertaken in the EIA form part of the Environmental Permit, as described in the Environmental Permit (FEP-01/122/2003) Condition 1.7, Part C (Permit Conditions), General Conditions, which states:

"1.7 ***The Permit Holder shall ensure that the project(s) is/ are designed and constructed in accordance with the information and recommendations described in the EIA Report*** *(Register No. AEIAR 040/2001); or mitigation measures described in the this Permit, or mitigation measures to be recommended in submissions that shall be deposited with or approved by the Director as a result of permit conditions contained in this Permit, or mitigation measures to be recommended under on-going surveillance and monitoring activities during the construction stage of the Project(s).* ***Where recommendations referred to in the documents of the Register are not expressly referred to in this Permit, such recommendations are nevertheless to be implemented unless expressly excluded or implicitly amended in this Permit****".*

As the JV is proposing to commence dredging and filling work prior to the relocation of the M4A and M3 intakes, this is considered a change in the construction programme of works and would be subject to Condition 3.2, Part C (Permit Conditions), Submissions or Measures for the Construction Period of the Project(s), of the Environmental Permit, as follows:

''3.2 The Permit Holder shall carry out dredging and filling works in phases for the Project(s) in accordance with:

> *(a) the sequence shown in Figure 5 to avoid formation of embayed water bodies and prevent water pollution problems; and*
>
> *(b) the specified maximum dredging and filling volumes together with the maximum hourly dredging rates for each phase of activities shown in Table 1.*

Any changes to the dredging and filling requirements in items (a) and (b) above shall be certified by the ET Leader and verified by the IEC as conforming to the recommendations contained in the EIA report. *The changes shall be immediately documented in the following monthly EM&A report and be made available to the public, following the requirements in Conditions 5.2 and 5.3 below, via internet access in the shortest possible time and in no event later than 2 weeks after the changes have been certified ''.*

The advancement of daytime dredging and filling thus requires certification and verification from the ET and the IEC prior to the commencement of the proposed works.

The JV has proposed the advanced dredging and filling as being necessary for the project and as being required due to unforeseen delays in the relocation of these intakes. As such, additional measures to reduce the potential for water quality impacts and to monitor the water quality impacts of the proposed dredging will be required by the JV. The ET has accepted these measures along with additional conditions during the proposed works, which include the following that shall be undertaken during the duration of the proposed advanced dredging / filing works at the FRAW seawall:

(1) The JV will provide mitigation to reduce water quality impacts as stated in their referenced letter.

(2) The JV shall undertaking additional water quality monitoring at stations M3 & M4A during mid-flood and mid-ebb on the days that monitoring is not undertaken by the ET as part of the routine water monitoring quality during mid flood and mid ebb tidal states.

Moreover, further sampling at 2 additional (mobile) monitoring stations (i.e. A & B) in the immediate area of the dredging/ seawall filling works (one near to and between the shore and the dredging/ filling works and one between the dredging / filling works and the open water to be specified by the ET.) shall be undertaken immediately after completion of dredging/ filling works during the days outside the ET's routine monitoring schedule.

Monitoring at M3 shall cease if the intake has been decommissioned. Also, upon any approved increase in the AL/ LL at M4A, the need for further monitoring shall be reviewed by the ET and IEC taking into consideration of the experience gained in data gathered.

The parameter to be analysed shall cover SS only and shall be undertaken by a HOKLAS accredited laboratory with the results reported within 36 hours of sampling to all relevant parties.

(3) The dredging rates for FRAW as listed in the Environmental Permit shall not be exceeded during the dredging work. All dredging works undertaken shall only be undertaken for the dredging of the FRAW seawall trench and all filling works for the seawall shall be limited to placement of rock fill within the dredged trench. Furthermore, protective measures shall be undertaken for the filling work, which shall include the use of floating silt curtain of a length in excess of the operating barge to prevent dispersion of any silt.

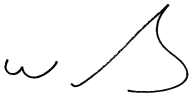
(4) Should there be any exceedance of the action/ limit levels for the suspended solids in the water quality at any of the seawater intakes (water sensitive receivers), the advanced works shall cease following the mechanism/ requirements specified in the EM&A Manual. In such case, additional mitigation measures shall be provided by the JV to the satisfaction of the ET and IEC before works can be resumed.

With the implementation of the above measures in full, the Environmental Team and Independent Checker have no objections to the changes proposed to FEP Condition 3.2(a) for the advanced FRAW seawall dredging/ filling works.

Susana Bezy, Environmental Team Leader:  Date: 10 Nov 2006

IC(E) Verification

I hereby verify the above information.

Bill Douglas, Independent Checker (Environment):  Date: 10 Nov 2006